

IN THE CLAIMS:

Please re-write the claims to read as follows:

- 1 1. (Currently Amended) A method for generating a backup of a database, the method com-
2 prising the steps of:
3 preparing the database for backup by rendering the database ~~substantially~~ coherent so
4 that the database can be restored without loss of data; and
5 creating a snapshot of a file system, the file system comprising files including the da-
6 tabase and associated log files while the file system is active and available for access by us-
7 ers.
- 1 2. (Currently Amended) The method of claim 1 further comprising the steps of:
2 generating snapinfo files in the file system including database log files and data asso-
3 ciated with the backup, the data associated with the backup used for database restore proce-
4 dures.
- 1 3. (Original) The method of claim 2 further comprising the steps of:
2 verifying the database for coherency; and
3 updating the snapinfo files with results of the verification of the database.

1 4. (Original) A method for generating a point-in-time restoration of a set of database files
2 and a set of associated log files to an active file system, the method comprising the steps of:
3 selecting, by a user, a backup to restore therefrom, the backup comprising a snapshot
4 of a file system including the set of database files and copies of the associated log files;
5 verifying the selected backup for coherency;
6 copying, in response to the backup being coherent, the snapshot of the set of database
7 files to the active file system; and
8 copying, in response to the backup being coherent, the copies of the associated log
9 files to the active file system.

1 5. (Currently Amended) The method of claim 4 wherein the step of copying the snapshot to
2 the active file system further comprises the step of:
3 copying contents of a root inode associated with the snapshot to a root inode associ-
4 ated with the active file system.

1 6. (Original) The method of claim 4 wherein the backup is selected from a set of backups
2 associated with the active file system.

1 7. (Currently Amended) The method of claim 4 wherein the method further comprises the
2 step of:
3 renaming the copies of the associated log files to a set naming convention.

1 8. (Original) The method of claim 4 wherein the database files and log files are associated
2 with electronic mail messages.

1 9. (Original) The method of claim 4 wherein the set of associated log files further comprises
2 data to be incorporated into the set of database files.

1 10. (Original) A method for generating a point-in-time restoration of a set of database files
2 and a set of associated log files to an active file system, the method comprising the steps of:
3 selecting, a backup to restore therefrom, the backup comprising a snapshot of a file
4 system including the set of database files, copies of the associated log files and copies of log
5 files associated with a set of snapshots created later in time than the selected snapshot;
6 verifying the selected backup;
7 copying, in response to the backup being successfully verified, the snapshot of the set
8 of database files to the active file system;
9 copying, in response to the backup being successfully verified, the copies of the asso-
10 ciated log files to the active file system; and
11 copying the copies of the log files associated with the set of snapshots created later in
12 time than the selected snapshot to the active file system.

1 11. (Currently Amended) The method of claim 10 wherein the step of selecting the backup
2 to restore from further comprises the step of:

3 a user selecting, from a set of backups to restore from.

1 12. (Currently Amended) The method of claim 10 wherein the step of copying the snapshot
2 to the active file system further comprises the step of:

3 copying contents of a root inode associated with the snapshot to a root inode associ-
4 ated with the active file system.

1 13. (Currently Amended) The method of claim 10 wherein the method further comprises
2 the step of:

3 renaming the copies of the associated log files to a set naming convention.

1 14. (Original) A method for generating a point-in-time restoration from a set of backups,
2 each of the set of backups comprising a snapshot and copies of a set of log files associated
3 with the snapshot, the method comprising the steps of:

4 selecting one of the set of backups to generate the point-in-time restoration therefrom;

5 copying the database files from the snapshot to an active file system; and

6 copying the copies of the set of log files to the active file system.

1 15. (Original) The method of claim 14 wherein the method further comprises the step of:

2 renaming the copies of the associated log files to a set naming convention.

1 16. (Currently Amended) The method of claim 14 wherein the step of copying the snapshot
2 to the active file system further comprises the step of:
3 copying contents of a root inode associated with the snapshot to a root inode associ-
4 ated with the active file system.

1 17. (Original) A method for generating a backup of a set of database files associated with
2 the database program and a set of associated log files, the method comprising the steps of:
3 performing a snapshot operation on the set of database files; and
4 copying the set of log files to a directory associated with the backup.

1 18. (Currently Amended) The method of claim 17 wherein the method further comprises the
2 step of:
3 validating a snapshot generated by the snapshot operation.

1 19. (Original) The method of claim 18 wherein the method further comprises the step of:
2 marking, in response to a successful validation of the snapshot, the snapshot as a
3 backup snapshot.

1 20. (Original) A computer-readable medium, including instructions executing on a com-
2 puter, for generating a point-in-time restoration of a set of database files and a set of associ-
3 ated log files to an active file system, the program instructions including instructions for per-
4 forming the steps of:

5 selecting, by a user, a backup to restore therefrom, the backup comprising a snapshot
6 of a file system including the set of database file and copies of the associated log files;
7 verifying the selected backup;
8 copying, in response to the backup being successfully verified, the snapshot of the set of da-
9 tabase files to the active file system; and
10 copying, in response to the backup being successfully verified, the copies of the asso-
11 ciated log files to the active file system.

1 21. (Original) A computer-readable medium, including instructions executing on a com-
2 puter, for generating a point-in-time restoration of a set of database files and a set of associ-
3 ated log files to an active file system, the program instructions including instructions for per-
4 forming the steps of:

5 selecting, a backup to restore therefrom, the backup comprising a snapshot of a file
6 system including the set of database files, copies of the associated log files and copies of log
7 files associated with a set of snapshots created later in time than the selected snapshot;
8 verifying the selected backup;
9 copying, in response to the backup being successfully verified, the snapshot of the set of da-
10 tabase files to the active file system;
11 copying, in response to the backup being successfully verified, the copies of the asso-
12 ciated log files to the active file system; and
13 copying the copies of the log files associated with the set of snapshots created later in
14 time than the selected snapshot to the active file system.

Please add new claims 22 et seq., as follows:

- 1 22. (New) A method for generating a backup of a file system, the method comprising
2 the steps of:
3 rendering the file system coherent in preparation for generating the backup, to
4 produce a coherent file system; and
5 creating a snapshot of the coherent file system, the snapshot created as a copy of a
6 set of pointers to data, the data stored in the coherent file system.
- 1 23. (New) The method as in claim 22, further comprising:
2 incorporating a log file into the file system to render the file system coherent.
- 1 24. (New) The method as in claim 22, further comprising:
2 maintaining the file system available for access by users while generating the
3 backup.
- 1 25. (New) A file system, comprising:
2 means for rendering the file system coherent in preparation for generating the
3 backup, to produce a coherent file system; and
4 means for creating a snapshot of the coherent file system, the snapshot created as
5 a copy of a set of pointers to data, the data stored in the coherent file system.

1 26. (New) The file system of claim 25, further comprising:
2 means for incorporating a log file into the file system to render the file system co-
3 herent.

1 27. (New) The file system of claim 25, further comprising:
2 means for maintaining the file system available for access by users while generat-
3 ing the backup.

1 28. (New) A file system, comprising:
2 a processor to render the file system coherent in preparation for generating the
3 backup, to produce a coherent file system; and
4 a snapshot manager to create a snapshot of the coherent file system, the snapshot
5 created as a copy of a set of pointers to data, the data stored in the coherent file system.

1 29. (New) The file system of claim 25, further comprising:
2 the processor to incorporate a log file into the file system to render the file system
3 coherent.

1 30. (New) The file system of claim 25, further comprising:
2 the processor and an operating system to maintain the file system available for
3 access by users while generating the backup.

- 1 31. (New) A computer readable media, comprising:
- 2 said computer readable media containing instructions for execution on a processor
- 3 for the practice of a method for generating a backup of a file system, the method having
- 4 the steps of:
- 5 rendering the file system coherent in preparation for generating the backup, to
- 6 produce a coherent file system; and
- 7 creating a snapshot of the coherent file system, the snapshot created as a copy of a
- 8 set of pointers to data, the data stored in the coherent file system.
-
- 1 32. (New) Electromagnetic signals propagating on a computer network, comprising:
- 2 said electromagnetic signals carrying instructions for execution on a processor for
- 3 the practice of a method for generating a backup of a file system, the method having the
- 4 steps of:
- 5 rendering the file system coherent in preparation for generating the backup, to
- 6 produce a coherent file system; and
- 7 creating a snapshot of the coherent file system, the snapshot created as a copy of a
- 8 set of pointers to data, the data stored in the coherent file system.